

assumed by the cell-contents (the rest of the cells in this as well as in the other filaments are not filled up, because the disposition of the contents in all is much alike); *d*, annular striæ indicative of a spore-cell before inflation.

- Fig. 2.* *Edogonium dioicum*. Male filament: *a, a, a*, antheridia, or groups of annular cells producing spermatozooids. *Vide fig. 8.*
- Fig. 3.* *Æ. diandronites*, H. J. C. (nov. sp.?): *a*, spore-cell previous to the formation of the micropyle and resting-spore; *b*, ditto, after their formation; *c, c, c*, annular cells, two in each group, bearing each a single spermatozoid.
- Fig. 4.* *Æ. triandronites*, H. J. C. (nov. sp.?): *a*, spore-cell before the formation of the micropyle and resting-spore; *b*, ditto, after their formation; *c, c, c*, annular cells, three in each group, producing spermatozooids.
- Fig. 5.* Resting-spore of *Æ. dioicum*, with the spermatozooids trying to effect incorporation.
- Fig. 6.* Ditto, with three spermatozooids fixed, apparently in three different degrees of arrested incorporation.
- Fig. 7.* Diagram of resting-spore, &c., of *Æ. dioicum*, to show—*a*, cell-wall of filament and spore-cell; *b*, protoplasmic sac or internal layer; *c*, outer coriaceous or thick covering of resting-spore; *d*, inner or thin layer of ditto; *e*, contents, consisting of starch-cells (?), protoplasm, chlorophyll, and a few oil-globules.
- Fig. 8.* Male filament of ditto, in dehiscence, showing—*a, a*, annular cells bearing spermatozooids; *b*, protoplasmic sac or inner cell-layer of prematurely opened annular cell containing two spermatozooids, each of which is again enclosed in its proper cell; *c*, ditto, with the latter ruptured; *d, d*, spermatozooids escaping from their cells direct.
- Fig. 9.* Resting-spore of *Æ. diandronites*, with three spermatozooids round the micropyle, and one entering.
- Fig. 10.* Ditto, representing the spermatozoid in the act of incorporation.
- Fig. 11.* Ditto, after the incorporation, with the three remaining spermatozooids still swarming round the micropyle.
- Fig. 12.* Resting-spore of *Æ. triandronites*, to show the beaded appearance round its circumference.
- Fig. 13.* Ditto of *Æ. dioicum*, showing abnormal development of conical cells: *a*, conical cell, containing fine muco-granular matter; *b*, ditto with ditto having passed into monads; *c*, ditto, empty, with the lid attached; *d*, ditto, growing out from the opposite side.
- Fig. 14.* Conical cell separate, with the lid opened, and the contents issuing enclosed in a delicate sac.
- Fig. 15.* Ditto, with the sac burst, and the contents issuing in the form of monociliated monads.
- Fig. 16.* Spermatozoid more magnified, to show its cilia.

V.—*Gleanings in British Conchology.*

By J. GWYN JEFFREYS, Esq., F.R.S.

[With a Plate.]

BEING informed by Mr. Hanley, the surviving author of 'A History of British Mollusca and their Shells,' that it is not his intention to publish a supplement to that excellent work, I will

now present to your readers a notice of a few new species and some additional localities which have occurred to me during this year. Probably no department of the British fauna has been more assiduously and successfully explored than that of our native testaceous Mollusca; and, as some proof of this, I may observe, that since the publication of Messrs. Forbes and Hanley's work (now nearly five years ago), scarcely any addition has been made to the list of established species, notwithstanding the increase in the number of collectors, and the assistance given by the British Association to dredging operations on various parts of our coasts. The recent discovery of *Mangelia Holböllii* in the north of Ireland is almost a solitary exception.

For all the present additions to the British Testacea I am more or less indebted to my kind friend Mr. Barlee, who has again, with his usual liberality, placed at my disposal the results of his indefatigable and valuable labours. One of the new species (viz. *Diodonta Barleei*) was dredged by him off the west of Ireland. Two others (*Poromya subtrigona* and *Eulimella obeliscus*) I procured from shell-sand dredged by him off the Zetland coast. Another species (*Odostomia minima*) was originally discovered by him in the last-named locality; although it has been noticed (but not described or figured) by Forbes and Hanley in the Appendix to their work. Three others (*Arca nodulosa* of Müller, *Rissoa glabrata* of Philippi, and *Amphipsyfra globosa* of Lovén) I now propose to add to the list; the first two having been found by me in Shetland and Skye shell-sand dredged by Mr. Barlee, and the last taken by him at Skye.

For some of the additional localities I have also to thank Edward Waller, Esq., of Lissenderry, near Aughnacloy, and Mr. Samuel Wright, jun., of Cork.

Reference will be given, in every instance, to the volume and page of the 'British Mollusca,' for the convenience of those who are especially interested in the subject, and may wish to judge for themselves as to the hitherto ascertained limits of distribution of any of the species here noticed.

I have again on this occasion adopted the Plinian use of the word 'uncia' to signify 'one-twelfth;' the integer being a foot, English measure.

I am in hopes of being followed and supported by other British conchologists in this endeavour to improve our knowledge of the native Testacea, so as gradually to form materials for a new edition of Forbes and Hanley's work. Every new locality (well authenticated, of course, in respect of accuracy and discrimination of species) will be most useful for this purpose. Some have been already recorded in previous pages of the 'Annals.'

Some of the species now noticed are "very rare," as far as specimens have been hitherto discovered; but it must be borne in mind that a few baskets of shell-stuff, or handfuls of sand, obtained by dredging, are but a very insignificant sample of those vast and various patches of sea-bottom which are dispersed over so many thousands of square miles within the line of soundings on our coasts. Further discoveries, therefore, both of species and specimens, may be confidently expected.

It is true that all the species which I here propose to describe or notice as new to this country, are small, and most of them even minute; but, far from adopting the maxim "*de minimis non curat Lex*," science regards with as much interest the tiniest productions of nature as the mammoth or the leviathan of the deep; and the revelations of the microscope are not less wonderful and important than those far-distant worlds which the telescope discloses to mortal eyes.

The recent separation by M. Milne-Edwards (and which has been adopted by M. de Quatrefages and other eminent zoologists) of the Tunicata from the true Mollusca has further narrowed the limits of this large and heterogeneous division of the Invertebrata, and might almost tempt Naturalists to revert to the use of the term (Vermes) TESTACEA, which the great systematist Linnæus proposed for the reception of what are now considered as Mollusca proper.

"Multa renascentur, quæ jam cecidere, cadentque
Quæ nunc sunt in honore vocabula, si volet usus,
Quem penes arbitrium est, et jus et norma loquendi."

All the Mollusca, as at present defined, are more or less invested by, or secrete, shells; although the latter are occasionally in a rudimentary or imperfectly developed state, or are only found during the earliest period of their growth, as is the case with the Cephalopoda, Limacidæ, and Nudibranchiata. There are unquestionably some exceptions to this proposition, especially in some of the Cuttles and Slugs; but an exception proves the rule, and it cannot be said with less justice, that the true Mollusca are not testaceous, than that certain species of *Odostomia* which are destitute of teeth therefore do not belong to that genus. Similar instances in other branches of natural history will doubtless occur to many of your readers.

The discovery on the east coast of Zetland of *Rissoa glabrata*, which has been hitherto regarded as exclusively Mediterranean (to which must be added, among the Foraminifera, *Peneroplis planatus*), and also, in the same locality, of *Arca nodulosa*, an Arctic species, as well as, in the north of Ireland, of *Mangelia Holböllii*, an inhabitant of the North Seas, makes

one distrust more than ever the limits of definite provinces as laid down by theorists on geographical distribution. It is pretty evident that the once popular theory of the transmission of marine animals (not being pelagic) by means of the Gulf Stream, will not satisfactorily account for the above facts, because that current sets on the *west* of Zetland, and does not impinge on any part of our eastern coasts. As far, too, as the icy current is concerned, it does not flow at all between Iceland and the British Isles.

The great and startling changes in Geology, arising from the discoveries which have been recently published by Sir Charles Lyell in the Supplement to his 'Manual,' show the necessity of continual and extended observation in every branch of science where the materials are not patent or insufficient. While touching on this subject, I cannot admit the inference which has been drawn by Sir Charles Lyell from one of those discoveries, that, because at certain remote æras distinct natural-history provinces existed on various parts of the earth's surface (evidenced by the remains of animals which had lived during some part of those periods being found imbedded in strata which are supposed to be of contemporaneous formation), therefore there never was a uniform fauna. His own proposition, that present causes were formerly in operation, and which might have effected a disruption of any such uniformity, seems scarcely to warrant the above inference. Whether there ever was a uniform, or more properly speaking, a universal fauna, it is almost impossible, in the present state of geological knowledge, satisfactorily to determine.

Acephala Lamellibranchiata.

Pholas candida, *Forb. & Hanl. Brit. Moll.* i. 117. Barmouth.

Pholadidea papyracea, i. 123. Ballycotton, with *Pholas candida*, *crispata*, and *dactylus* (*Mr. S. Wright, jun.*).

Gastrochæna modiolina, i. 132. Barmouth; in limestone, probably imported from Anglesea.

Sphænia Binghami, i. 190. Cork Harbour (*Wright*).

Næra cuspidata, i. 195. Arran Isle, county Galway (*Barlee*).

N. abbreviata, i. 201. Skye (*Barlee*).

Poromya subtrigona, n. s. Pl. II. fig. 1.

Testa oblique triangularis, ventricosa, inæquilatera, antice rotundata, postice latior et subtruncata, solidula, alba, nitida, strigibus transversis minutissimis confertis et striis remotis perpaucis versus marginem ventralem notata, intus radiatim striatula; margine antico subrecto; margine postico deciso; umbonibus prominulis, minime incurvis; lunula vix distincta; cardine, dentibus, fossa

cardinali et fovea ligamentali fere ut in *P. granulata*; long. $\frac{1}{25}$, lat. $\frac{1}{30}$ unciae.

Only a single valve of this remarkable shell has occurred to me, in Shetland sand. It differs from the young of *Poromya granulata* in form, texture, and the absence of the scabrous markings which distinguish that species. I searched in vain the collections at the British Museum and of Mr. Cuming for its counterpart. I may be, perhaps, considered very rash in proposing to found a new species on a single valve; but I, of course, do so only *quantum valeat*, and would observe, that science has often benefited by the publication of any fact, however incomplete, the hiatus being afterwards filled up by further researches and discoveries.

Thracia villosiuscula, i. 224. Arran I., Galway (*Barlee*); Cork (*Wright*).

Diodonta Barleei, n. s. Pl. II. fig. 2.

Testa triangularis, subinaequilatera, compressa, antice productior, postice subtruncata, hyalina, nitida, fere glabra; marginibus lateralibus utrinque declivibus; margine ventrali rotundato; umbo-nibus prominentibus, rectis, nucleatis; lunula nulla; ligamento, cardine, et dentibus ut in *D. fragilis*; long. $\frac{1}{20}$, lat. $\frac{1}{25}$ unc.

About a dozen specimens of different sizes were taken by Mr. Barlee in dredging off Arran Isle, on the west coast of Ireland. At first I suspected them to be the fry of *Diodonta fragilis*, which is not uncommon in the same locality; but, on comparing them with an umbonal segment of the same size, taken from a specimen of the latter species, I perceived that they would differ from the young of *D. fragilis* in being more compressed and obtusely triangular, and in the ventral or front margin being more rounded, besides being quite destitute of the transverse ribs and longitudinal grooves of that species. It should also be observed, that the fry of *Lucina Borealis* show most distinctly the transverse and irregular striæ or wrinkles, and are of the same relative shape as adult individuals. The present species bears some resemblance in form and size, but not in markings or dentition, to *Montacuta substriata*.

Scrobicularia piperata, i. 326. Barmouth.

Astarte triangularis, i. 467. Arran Isle, Galway (*Barlee*).

Cardium nodosum, ii. 22 (*C. papillosum* of Philippi being the older name). Barmouth.

C. Suecicum, ii. 33 (*C. minimum* of Philippi being prior in date, and more appropriate). Arran Isle, Galway (*Barlee*).

Lucina Borealis, ii. 46. Barmouth.

Montacuta ferruginosa, ii. 72. Barmouth.

M. bidentata, ii. 75. Barmouth; Shetland sand.

Kellia (*Poronia*) *rubra*, ii. 94. Barmouth.

Lepton nitidum, ii. 92, and var. *convexum*, ii. 102. Arran Isle, Galway (*Barlee*).

L. Clarkiæ, iv. 255. Arran Isle, Galway, and Fowey (*Barlee*);

Barmouth, where single valves are not uncommon; Skye sand. It has somewhat the appearance of *Montacuta bidentata*, and may have been overlooked for that species; but it essentially differs in form and dentition.

Pisidium nitidum, ii. 126. Barmouth.

Nucula nitida, ii. 218. Barmouth.

Leda pygmæa, ii. 230. Shetland sand.

Arca nodulosa, Müll. Prodr. Zool. Dan. p. 247; Lovén, Ind. Moll. Scand. Occid. p. 33.

I found a single valve of a young individual in Shetland sand; and it differs in no respect from Norwegian specimens of *Arca nodulosa* in the British Museum, or from a single valve which Mr. M'Andrew obligingly sent me for comparison, and which he obtained by dredging last year in the North Sea. Lovén refers this species, with doubt, to the *A. scabra* of Poli, and he supposes a variety of it to be identical with *A. aspera* of Philippi: but the number of hind teeth in the latter species is described by Philippi to be half as many again (viz. fifteen) as those in *A. nodulosa*. They may not, however, be specifically distinct. The present species may readily be distinguished from *A. lactea* (which is very variable in form and sculpture) by the position of the beaks, and having comparatively few and differently arranged teeth.

Lima subauriculata, ii. 263. Arran Isle, Galway (*Barlee*).

Pecten furtivus, Lov. (F. & H. ii. 284). Skye (*Barlee*), with *P. striatus*. This species differs, in form and sculpture, from all the varieties which I have seen of *P. striatus*, many hundred specimens of which, and about a score of *P. furtivus*, have passed through my hands. It is also a Mediterranean species; and M. Costa's collection, in the British Museum, from the coast of Naples, contains many specimens of this beautiful shell.

Anomia ephippium, ii. 325. I agree with Mr. Clark in considering *A. aculeata* to be merely a variety of this species; and I would also unite *A. striata* of Lovén with *A. patelliformis*.

Acephala Palliobranchiata, or Brachiopoda.

Terebratula caput-serpentis, ii. 353. Arran Isle, Galway (*Barlee*).

Gasteropoda Prosobranchiata.

Adeorbis subcarinata, ii. 541. Barmouth.

Lacuna crassior, iii. 67. Not uncommon in Swansea and the adjacent bays (omitted by Forbes and Hanley); Cleethorpe, Lincolnshire.

Rissoa rufilabrum, iii. 106. Barmouth; Shetland sand.

R. labiosa, iii. 109. Barmouth.

R. semistriata, iii. 117. Barmouth; Shetland sand.

R. rubra, iii. 120. Shetland and Skye sand.

R. glabrata, Phil. (and *R. punctulum* of same author). I found one adult and two or three immature specimens in the Shetland and

Skye sand, as well as characteristic examples of *Peneroplis planatus*, a Mediterranean Foraminifer, which Mr. Barlee had previously found in the same locality. Its nearest ally, as I remarked in my paper on Piedmontese Testacea (Annals, vol. xvii. p. 183), is *R. vitrea*. Under the microscope are discernible some faint but regular transverse striæ, which *R. vitrea* and probably every other apparently smooth species of *Rissoa* also exhibit with the same optical aid. The contour, substance, and colour, however, sufficiently distinguish this from any other species of *Rissoa*. Mr. Alder has pointed out to me that the upper whorls of this species, when examined under a microscope, appear punctured like the top of a thimble.

R. soluta, iii. 131. Shetland and Skye sand.

Jeffreysia diaphana, iii. 152. Barmouth; Skye sand.

J. globularis, iv. 268. Adult specimens from Skye sand have four whorls, and exhibit, under an ordinary magnifying power, coarse spiral striæ. The size is half as large again as that given by Forbes and Hanley. Operculum as in *J. opalina*. The fry are most abundant in Skye at the roots of sea-weed.

Skenea planorbis, iii. 156; var. *hyalina*. Skye sand.

S. nitidissima, iii. 158. Tenby and Gower Coast, South Wales (omitted in Brit. Moll.). Skye sand.

Id. var. *hyalina*. Skye sand; very rare.

S. rota, iii. 160. Tenby (omitted in Brit. Moll.); Skye sand.

Cæcum trachea, iii. 178. Barmouth.

C. glabrum, iii. 181. Barmouth; Skye sand.

Scalaria communis, iii. 206. Barmouth.

S. clathratula, iii. 209. Barmouth; Shetland sand.

Aclis ascaris, iii. 219. Arran Isle, Galway (*Barlee*); Barmouth.

A. supranitida, iii. 221. Barmouth.

Eulima bilineata, iii. 239. Skye sand.

Chemnitzia? (*Aclis*) *unica*, iii. 222. Barmouth.

Odostomia acuta, var. *alba*, iii. 269. Cork Harbour (*Wright*); Shetland sand.

O. plicata, iii. 271; var. *spira brevior*, anfractibusque versus basem angulatiore; Skye sand. This form is almost intermediate between *O. plicata* and *unidentata*; and it must be admitted that many of the species are subject to considerable variation.

O. dubia, iii. 276. Barmouth; Shetland sand.

O. cylindrica, iii. 287. Groomsport, Belfast Bay (*Waller*); Skye sand. My specimen from the last-named locality has all the characters of this species, except in being a trifle broader, and possessing a small, but distinct, umbilical crevice, which is wanting in the typical form.

O. minima, n. s. Pl. II. fig. 3.

Testa oblongo-conica, hyalina, nitida, strigibus longitudinalibus remotis flexuosis leviter notata; anfractibus 5, convexiusculis, primo subheterostropho, ultimo reliquos superante; sutura profunda; apertura ovali, versus basin subeffusa, tertiam spiræ partem æquante; columella arcuata, dente exiguo, vix conspicuo, munita;

labro in adultis exemplis continuo, ad columellam subreflexo; umbilico parvo, angusto; operculo membranaceo, pauci-spirali; long. $\frac{1}{20}$, lat. $\frac{1}{50}$ unc.

This exquisite little shell, which is by far the smallest of the true *Odostomia*, was noticed by Forbes and Hanley at p. 282 of the Appendix to the 'British Mollusca,' as allied to the *Chemnitzia Gulsone* of Clark; but it is widely different from that species in its size, form, markings, and other respects. Its nearest ally, perhaps, is *Odostomia cylindrica*; but it may be distinguished from that and other species of *Odostomia* by its contour and the complete continuity of the lip in adult specimens. The first discoverer of this species was Mr. Barlee, who found it alive on the fronds and roots of *Laminaria digitata* in the littoral zone at Lerwick; and I have also found it, but sparingly, in shelly sand dredged by him in the same locality. I have had the operculum of *O. truncatula* figured in juxtaposition (Pl. II. fig. 4), as no representation of an *Odostomian* operculum is given in the 'British Mollusca.'

O. insculpta, iii. 289. Barmouth.

O. obliqua, iii. 291. Barmouth; Shetland and Skye sand.

O. dolioliformis, iii. 301. Barmouth.

O. decussata, iii. 303. Barmouth.

Eulimella affinis, iii. 313. Arran Isle, Galway (*Barlee*), with *E. acicula*. This appears to be its southernmost limit.

E. (Aclis) nitidissima, iii. 223. Arran Isle, Galway (*Barlee*); Shetland and Skye sand.

E. obeliscus, n. s. Pl. II. fig. 5.

Testa elongato-conica, solidula, nitida, alba, strigibus longitudinalibus vix conspicuis impressa; anfractibus 6, sensim incrementibus, complanatis; sutura parum profunda, obliqua; apertura trapeziformi, versus basin subeffusa, vix tertiam spiræ partem æquante; columella subrecta, incrassata, edentula; labro simplici, interrupto, superne inverso; umbilico nullo; long. $\frac{3}{40}$, lat. $\frac{1}{40}$ unc.

Of this distinct species I have only taken two or three specimens in Shetland and Skye sand. It has somewhat the aspect of a miniature *Eulimella Scillæ*, but is more nearly allied to *E. nitidissima*.

Cerithiopsis tuberculare, iii. 365. Barmouth.

Id. var. *alba*. Arran Isle, Galway (*Barlee*).

Nassa pygmæa, iii. 394. Barmouth.

Buccinum Holbölli.

Mangelia Holbölli, (*Beck*) Möller, Ind. Moll. Grœnl. p. 12.

Triton Holbölli, Lov. Ind. Moll. Scand. Occid. p. 12.

Columbella (Astyris) Holbölli, Mörch, Prod. Faun. Moll. Grönl. (1857) p. 14.

This species was announced at the last meeting of the British Association as having been taken in the north of Ireland. Mr. Waller (who obligingly presented me with a specimen) informs me that he

was one of the captors of this prize, in company with Dr. Dickie and Mr. Hyndman, and that all the specimens (about a dozen in number, of different sizes) were taken, in one haul of the dredge, from the Turbot-bank, a little north of the mouth of Belfast Bay, at a depth of about 20 fathoms. All the specimens appear to have been much water-worn, and deprived by friction of nearly every trace of those basal grooves and apical ribs which are observable in fresh specimens. The spire is rather shorter, and the whorls consequently are more swollen than in Norwegian specimens which are to be seen in the British Museum; Mr. M'Andrew having also kindly sent me some from the North Sea. The typical form appears to be allied to the *Buccinum minus* of Philippi.

Fusus antiquus, iii. 423. Barmouth. This appears to be the southernmost known limit for this species, as well as the northernmost for *Venus chione*.

Mangelia septangularis, iii. 458. Barmouth.

M. scabra (*M. linearis*, var.), iii. 470. Shetland sand. (See Ann. vol. xvii. p. 187.)

M. attenuata, iii. 488. Barmouth.

Gasteropoda Opisthobranchiata.

Cylichna strigella, iii. 518. Arran Isle, Galway (*Barlee*).

Amphisphyræ globosa, *Lov. Ind. Moll. Scand. Occid.* p. 11.

A single specimen only was discovered by Mr. Barlee in dredging off Skye last year. It agrees fairly with Lovén's description; but he has not noticed the delicate, flexuous, longitudinal grooves which are discernible under a high magnifying power. The colour of the shell, when covered with the epidermis, is rufous brown. Owing to its expanded aperture, it has somewhat the appearance of a *Velutina*. As it has not yet been figured, I thought a drawing (Pl. II. fig. 6) by that excellent and accurate artist, Mr. J. de C. Sowerby, would be acceptable.

Philine quadrata, iii. 541. Arran Isle, Galway (*Barlee*).

P. punctata, iii. 547. Barmouth.

Gasteropoda Pulmonifera.

Zonites purus, iv. 37. Barmouth.

Z. radiatulus, iv. 38. Barmouth.

Z. excavatus, iv. 40. Gellygryon, near Swansea; Llanberris, Tanywlch, and Barmouth, North Wales.

Id. var. *hyalina*. Trosserch Wood, Carmarthenshire.

Helix Cantiana, iv. 50. Swansea (omitted in 'British Mollusca').

H. lamellata, iv. 73. Inverary (*Barlee*).

Pupa substriata, iv. 108. Barmouth.

P. antivertigo, iv. 109. Barmouth.

Cephalopoda Dibranchiata.

Spirula Peronii, iv. 242. Swansea Bay, with part of the animal

attached (omitted in 'British Mollusca'); but of course it can only be regarded, as well as the *Ianthinæ*, as occasional visitants of our coasts, having been probably brought hither by the Gulf Stream.

1 Montagu Square, London.
Dec. 1857.

EXPLANATION OF PLATE II.

- Fig. 1. *Poromya subtrigona*.
Fig. 2. *Diodonta Barleei*.
Fig. 3. *Odostomia minima*.
Fig. 4. Operculum of *O. truncatula*.
Fig. 5. *Eulimella obeliscus*.
Fig. 6. *Amphisphyræ globosa*.

VI.—Descriptions of three new species of Diurnal Lepidoptera.

By FREDERIC MOORE.

Genus LIMENITIS, Fabr.

1. *Limenitis Mata*, Moore.

Distinguished from *Lim. Procris* by the black colour of the upper side, and deep red of the transverse band from apex of fore-wing to abdominal angle, and a short, transverse band near the base of the fore-wing; also in the white spots of the fore-wing being widely separated, and the broad white band on the hind-wing being short and extending to the middle of the abdominal margin.

Expanse, $2\frac{5}{8}$ inches.

Hab. Manilla. In Coll. Brit. Mus. and W. W. Saunders, Esq.

2. *Limenitis Calidosa*, Moore.

Differs on the upper side from *Lim. Zulema*, Doubleday, in having the hind-wings more rounded; the transverse maculated band being narrower, and its outer margin on hind-wing much scalloped; also the spots on the fore-wing are widely separated, especially those obliquely from the costal margin; and the two small subapical spots are absent.

Expanse 2 inches.

Hab. Ceylon. In Coll. Brit. Mus. and E. L. Layard, Esq.

Genus HESTINA, Westwood.

Diadema (Hestina), Westwood, in Doubleday and Hewitson's Diurnal Lep. p. 281 (1850).

3. *Hestina Mena*, Moore.

Male. Upper-side pale greenish-white; fore-wing with all the